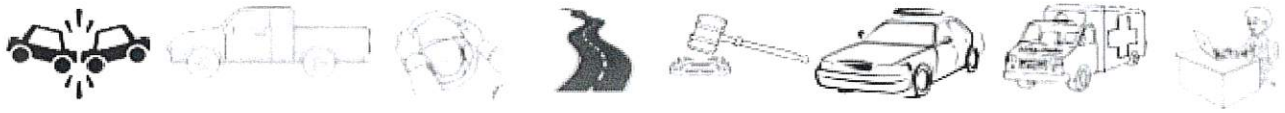
UTAH TRAFFIC RECORDS INFORMATION SYSTEMS STRATEGIC PLAN

Utah Traffic Records Coordinating Committee (UTRCC)



May 30, 2020

STATE OF UTAH

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UTAH TRAFFIC RECORDS COORDINATING COMMITTEE (UTRCC) STRATEGIC PLAN ENDORSEMENT

Representatives of the Utah Traffic Records Coordinating Committee have reviewed the Utah Traffic Information Systems Strategic Plan and endorse the plan.

Barbra Christofferson 5-22-2020

Barbra Christofferson, State Traffic Records Coordinator — Date
Traffic Records Program Manager
Utah Department of Public Safety, Highway Safety Office

INTRODUCTION

The Utah Traffic Records Information Systems Strategic Plan serves as a guiding document for Utah's Traffic Records Coordinating Committee (UTRCC). The purpose of this document is to provide a guide for Utah's traffic records information community to work towards increasing timeliness, accuracy, completeness, accessibility, and uniformity of Utah's traffic records systems. This document offers a foundation for members and their organizations to continue working as one cohesive committee in efforts to improve and update data systems. Within this document are goals and objectives set forth as a committee to be used as a measurement tool of system improvement over the next five years.

PLANNING PROCESS

The goals and performance measures contained in this document are based upon the recommendations and findings from the most recent assessment conducted on the Utah traffic records information system. Assessment recommendations from other related traffic safety studies have also played a role in determining some of the goals and objectives in specific areas of the strategic plan. The most recent traffic records assessment conducted in Utah occurred in May, 2019. This assessment was conducted by the National Highway Traffic Safety Administration (NHTSA)

With the assessments as guides, a framework was developed for Utah's Traffic Records Information System Strategic Plan. Additionally, the UTRCC members provided direction and feedback on the focus of the goals and objectives using their diverse expertise and experience in each of the traffic safety-related areas. Additionally, during this last fiscal year, the TRCC meetings were dedicated to a gap analysis process involving the crash system. The group created a timeline from the crash event to data analysis to identify the gaps in both people and data processes. The analysis of these gaps will provide valuable insight for the planning process in FY2021. It is planned to conduct the same analysis on the citation system

STRATEGIC PLAN REVISION AND ACCOUNTABILITY

This document is intended to be a living document. As with prior strategic plans, this plan will be reviewed by the UTRCC on an annual basis. Reviewing the plan annually provides an opportunity for committee members to revise project plans to better meet changes in organizational priorities, as well as, any changes at the state or federal level.

The performance measures given in the goals and objectives section will be reviewed for progress at least annually. By doing so, the committee can ensure that data improvement projects are moving forward in a timely manner as prescribed by the State. Additionally, such improvement will ensure that demonstrated measurable progress will be met for the annual 405(c) certification.

UTAH TRAFFIC RECORDS COORDINATING COMMITTEE OVERVIEW

The Utah Traffic Records Coordinating Committee (UTRCC) is a multidisciplinary, interagency committee

that has agreed to collaborate in the implementation of the Utah Traffic Safety Information Systems Strategic Plan. The mission of UTRCC is to provide more timely, accurate, complete, uniform, integrated and accessible data to the traffic safety community.

The UTRCC is operational and functioning, and members of UTRCC represent the interests of the following:

- Highway safety;
- Highway infrastructure;
- Law enforcement and adjudication;
- Public health and injury control;
- Motor carrier agencies and organizations.
- Local organizations
- Drivers License
- Motor Vehicle

ROLE OF UTAH TRAFFIC RECORDS COORDINATING COMMITTEE

The role and function of the Utah Traffic Records Coordinating Committee (UTRCC) is outlined as follows:

- Review and approve the Utah Traffic Safety Information Systems Strategic Plan;
- Review Utah's highway safety data and traffic records systems;
- Review changes to Utah's highway safety data and traffic records systems before the changes are implemented;
- Provide a forum for the discussion of highway safety data and traffic records issues;
- Report any highway safety data and traffic records issues to the agencies and organizations in Utah that create, maintain and use highway safety data and traffic records;
- Consider and coordinate the views of organizations in Utah that are involved in the administration, collection and use of the highway safety data and traffic records system;
- Represent the interests of the agencies and organizations within the traffic records system to outside organizations; and
- Review and evaluate new technologies to keep the highway safety data and traffic records systems up-to-date.

UTRCC MEETINGS

UTRCC meets on at least a quarterly basis to ensure proper communication and collaboration. Meetings are normally on the first Thursday of the month. Over the last year were held on:

- November 7, 2018
- February 7, 2019
- June 24, 2019
- December 5, 2019
- February 6, 2020
- May 7, 2020

UTAH TRAFFIC RECORDS COORDINATING COMMITTEE ROSTER

Name	Title		Agency	Function
Greg Willmore	Bureau Chief		Utah Department of Public Safety, BCI	Crash, Citation, Driver, Vehicle
Angie Turner	Records Manager/Analyst		Ogden City Police Department	Crash, Citation, Driver, Vehicle
Matt Peters	IT Director		DTS, AGRC/GIS	Crash
Brendan Duffy	Data Architect/Program Manager		University of Utah, College of Engineering	Crash, Driver, Roadway, Vehicle
Chad Sheppick	Director		Utah Department of Transportation, Motor Carrier Division	Roadway, Vehicle
Christopher Caras	Director		Utah Department of Public Safety, Driver License Division	Driver
David Blauer	Program Manager		Federal Motor Carrier Administration	Vehicle
David Garcia	Division Administrator		Federal Motor Carrier Administration	Vehicle
Felicia Alvarez	EMS Data Manager		Utah Department of Health. EMS	EMS
Barbra Christofferson	Program Manager		Utah Department of Public Safety, Highway Safety Office	All
Hannah Gaskill	Records Manager/Analyst		Weber County Sheriff's Office	Crash, Citation, Driver, Vehicle
John Fairbanks Jr.	Manager		Utah Department of Public Safety, Driver License Division	Driver
Juan Medina	Research Assistant Professor		University of Utah, College of Engineering	Crash, Driver, Roadway, Vehicle
Kathy Wilcox	Manager		Utah Department of Public Safety, BCI	Crash, Citation, Driver, Vehicle
Kristen Rogers	Court Support Services		Administrative Office of the Courts	Citation
Carrie Silcox	Director		Utah Department of Public Safety, Highway Safety Office	All
Larry Cook	Professor		The University of Utah, School of Medicine	Crash, Driver, EMS
Matt Slawson	Chief Forensic Toxicologist		Utah Department of Health, Toxicology	Driver, EMS
Melanie Crittenden	Division Director		Utah Communications Authority	All
Mike Cook	Supervisor		Utah Department of Public Safety, Driver License Division	Driver
Paul Barron	Applications Services Manager		Administrative Office of the Courts	Citation
Rick Martin	Application Developer		Administrative Office of the Courts	Citation
Robert Miles	Director		Utah Department of Transportation	Roadway
Roland Stanger	Safety and Operations Program Manager		Federal Highway Administration	Roadway
Sam Clark	IT Director		DTS, Public Safety	All

Steve Coons	IT Director		DTS, Utah Tax Commission	Vehicle
Travis Trotta	Lieutenant		Utah Department of Public Safety, Utah Highway Patrol	Crash, Citation, Driver, Vehicle
Jeff Lewis	Safety Programs Engineer		Utah Department of Transportation	Crash, Roadway
Yukiko Yoneoka	EMS Data Analyst		Utah Department of Health. EMS	EMS
Briana Bitner	FARS Analyst		Utah Department of Public Safety, Highway Safety Office	Crash
Jeff Duncan	Health & Statistics Manager		Utah Department of Health	Roadway, Crash
Chelsey Burnsd	IT Manager		DTS, Public Safety	All
Connie Collins	Crash Studies Analyst		Utah Department of Transportation	Crash

UTAH TRAFFIC RECORDS INFORMATION STRATEGIC PLAN ELEMENTS

STRATEGIC GOALS

- **Timeliness:** Reduce or maintain the span of time between the occurrence of an event and entry into the appropriate traffic records database.
- **Accuracy:** Increase the amount of traffic records data that is error-free, satisfies internal consistency checks, and does not exist in duplicate within a single database.
- **Completeness:** Decrease both the number of records that are missing from the traffic records databases and the number of missing data elements in the records that are in the databases.
- **Uniformity:** Update and maintain the consistency among the files or records in the traffic records systems and how they measure against independent or national standards.
- **Integration:** Increase the ability of records in a database to be linked to a set of records or components thereof in another traffic records database.
- **Accessibility:** Facilitate the ability of legitimate users to successfully obtain desired data in traffic records systems.

PERFORMANCE MEASURES

Timeliness: Reduce or maintain the span of time between the occurrence of an event and entry into the appropriate traffic records database.

T1: Increase the percentage of crash reports submitted into the database within 30 days after the crash.					
YEAR	2015	2016	2017	2018	2019
% submitted	96.35%	97.40%	97.40	97.3	97.3
T2: Decrease the mean number of days from fatal crash events to initial FARS Entry.					
YEAR	2015	2016	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019
# days	9	11	7	8	14
T3: Decrease the median days from a commercial vehicle crash event to crash submission to FMCSA MCMIS file from 53 to 30.					
YEAR	2015	2016	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019
# days	15	20	20	20	15.66
T4: Decrease the median days from the crash event to crash geo-located on crash file from 218 in 2013 to 21.					
YEAR	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019	04/01/2019-03/31/2020
# days	90	9	41	131	200
T5: Decrease the percentage of citations filed with CORIS greater than 5 days past the date of the violation event.					
YEAR	July 2014	July 2015	July 2016	July 2017	July 2018
% citations	9.6%	9.5%	8.9%	7.25%	7.73%

T6: Decrease the number of median days from the date of the event to date accessible in the trauma registry.					
YEAR	2014	2015	2016	2017	2018
# days	142	132	151	150	150
T7: Decrease the mean number of days from date of sample arrival time at the Utah Public Health Laboratory until a report is issued to law enforcement to 14 days.					
YEAR	2014	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019
# days	14 days (6,174 cases)	24 days (6,388 cases)	25 days (7,633 cases)	26 days (7868 cases)	28 days (8103 cases)
		Without primary screening instrument, chief scientist, and toxicologist for some of the year.			

Accuracy: Increase the amount of traffic records data that is error-free, satisfies internal consistency checks, and does not exist in duplicate within a single database.

ACR1: Decrease the percentage of prehospital records with errors in certain fields. (The specific data elements for this performance measure will be inserted in 2017, once the majority of Utah EMS agencies are using the new integrated system)					
YEAR	2017	2018	2019	2020	2021
% with errors	2.52%	2.52%	1.5%		
ACR2: Decrease the percentage of Trauma Registry records with errors in certain fields (The specific data elements for this performance measure will be inserted in 2017, once the majority of Utah EMS agencies are using the new integrated system)					
YEAR	2017	2018	2019	2020	2021
% with errors	15%	14%	14%		
ACR3: Decrease the percentage of Emergency Room records with errors in certain fields.					
YEAR	2014	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019
% with errors	76%	65%	34%	10%	2.75%
ACR4: Decrease the percentage of Hospital Discharge records with errors in certain fields.					
YEAR	2014	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019
% with errors	64%	57%	37%	14%	7.07%

Completeness: Decrease both the number of records that are missing from the traffic records databases and the number of missing data elements in the records that are in the databases.

C1: Decrease the percentage of reportable crash reports with unknowns or blanks elements for which unknown or blank is not an acceptable value.					
YEAR	4/1/14-3/31/15	4/1/15-3/31/16	4/1/16-3/31/17	4/1/17-3/31/18	4/1/18-3/31/19
First Harmful Event	0.59%	0.21%	0.00%	0.00%	0.00%
Crash Severity	0.08%	0.00%	0.00%	0.00%	0.00%
Manner of Collision	0.24%	0.08%	0.06%	0.06%	0.05%
C2: Increase the percentage of public roadways with route and milepost (LRS) accurately identified or referenced from 31% to 100%.					
YEAR	2016	4/1/16-3/31/17	4/1/17-3/31/18	4/1/18-3/31/19	4/1/2019 -3/31/20
% roadways with LRS accurately identified	100%	100%	100%	100%	100%

C3: Increase the completeness of the interface crash data system.					
YEAR	2015	2016	2017	2018	2019
% of interface improvements	96.35%	97.40%	97.3%	97.3%	98%

Uniformity: Update and maintain the consistency among the files or records in the traffic records systems and how they measure against independent or national standards.

U1: Maintain the number of NEMSIS data elements supported by Utah at 100%.					
YEAR	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019	04/01/2019-03/31/2020
% Elements	100%	100%	100%	100%	100%
U2: Increase the percentage in compliance with MMUCC 4.0 reporting standards.					
YEAR	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019	04/01/2019-03/31/2020
% Elements	66.4%	68.7%	68.7%	68.7%	72.5%

Integration: Increase the ability of records in a database to be linked to a set of records or components thereof in another traffic records database.

I1: Increase the percentage of crash, location, vehicle, driver elements integrated with FARS database.					
YEAR	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019	04/01/2019-03/31/2020
% elements	0	0	0	0	0
I2: Increase the number of driver and/crash records integrated for traffic safety analysis purposes.					
YEAR	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019	04/01/2019-03/31/2020
# records	0	0	0	0	0
I3: Increase the number of vehicle and crash records integrated for traffic safety analysis purposes.					
YEAR	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019	04/01/2019-03/31/2020
# records	0	0	0	0	0
I4: Increase the number of citation and crash records integrated for traffic safety analysis and resource management purposes.					
YEAR	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019	04/01/2019-03/31/2020

# records	0	0	0	0	0
I5: Increase the number of crashes and emergency department records integrated for traffic safety analysis purposes.					
YEAR	2013	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019	04/01/2019-03/31/2020
# records	12,538	12,538	12,538	12,538	12,538
I6: Increase the percentage of records in the prehospital files linked to the trauma registry					
YEAR	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019	04/01/2019-03/31/2020
# records	19%	17%	15%	64%	0%
I7: Increase the percentage of records linked between the prehospital and hospital discharge files.					
YEAR	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019	04/01/2019-03/31/2020
# records	0	0	0	0	0
I8: Increase the percentage of records linked between the Hospital Discharge and Vital Records file.					
YEAR	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019	04/01/2019-03/31/2020
# records	0	0	0	0	0
I9: Increase the number of adjudicated citation records linked to crash records.					
YEAR	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019	04/01/2019-03/31/2020
# records	0	0	0	0	0
I10: Increase the number of roadway jurisdictions that update the statewide roads dataset through a common interface.					
YEAR	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019	04/01/2019-03/31/2020
# systems	0	0	0	0	0
I11: Increase the number of roadway attributes and characteristics linked to citation records file.					
YEAR	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019	04/01/2019-03/31/2020
# roadway elements	0	0	0	0	0

I12: Increase the number of roadway attributes and characteristics linked to FARS file.					
YEAR	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019	04/01/2019-03/31/2020
# roadway elements	0	0	0	0	0

Accessibility: Facilitate the ability of legitimate users to successfully obtain desired data in traffic records systems.

ACS1: Increase the percentage of law enforcement sections and organizations utilizing the official DDACTS Mapping Tool.					
YEAR	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019	04/01/2019-03/31/2020
# agencies	0	0	0	0	0
ACS2: Increase the number of users accessing UDOT's portal for Data requests.					
YEAR	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019	04/01/2019-03/31/2020
# users	252	539	655	655	725
ACS3: Increase the number of users accessing IBIS for data requests. (measured by hits, i.e. the number of requests)					
YEAR	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019	04/01/2019-03/31/2020
# users	230,448	190,517	265,080	256,647	256,647
ACS4: Increase the number of requests for vital records accessed through the online request form.					
YEAR	2015	04/01/2016-03/31/2017	04/01/2017-03/31/2018	04/01/2018-03/31/2019	04/01/2019-03/31/2020
# data requests	36,506	50,608	38,360	38,360	38,360

UTAH TRAFFIC RECORDS INFORMATION SYSTEMS DEMONSTRATED MEASURABLE PROGRESS

The provisions of Section 405(c) grant application require States to demonstrate measurable improvement in at least one of the six core systems. Improvement must be shown in one of the prescribed performance areas of timeliness, accuracy, completeness, uniformity, accessibility, and integration.

	Performance Measure #1			
Performance Area:	Crash Timeliness			
Improvement Details				
Baseline Value	Current Value	Beginning Date	Ending Date	Improvement +-
6.96 days	6.09 days	4/1/2018	3/31/2019	.87 days
Narrative:	Decrease the mean number of days from the crash date to submission to the crash repository			

	Performance Measure #2			
Performance Area:	FARS Entry Timeliness			
Improvement Details				
Baseline Value	Current Value	Beginning Date	Ending Date	Improvement +-
8 Days	4 Days	4/1/2018	3/31/2019	4 Days
Narrative:	T3: Decrease the mean number of days from fatal crash event to initial FARS Entry.			

	Performance Measure #3
Performance Area:	Commercial Vehicle Crash Entry Timeliness
	Improvement Details

The provisions of the Section 405(c) grant application require States to demonstrate measurable improvement in at least one of the six core systems. Improvement must be shown in one of the prescribed performance areas of timeliness, accuracy, completeness, uniformity, accessibility, and integration.

In accordance with the requirement, Utah submits the following performance measures as its

demonstrated measurable progress for certification FFY2019:

Baseline Value	Current Value	Beginning Date	Ending Date	1m provement +-
20.47 Days	20 Days	4/1 /2018	3/31/2019	15.66 Days
Narrative:	Decrease the median days from a commercial vehicle crash event to crash submission to FMCSA MCMIS file from 53 to 30.			

Recommendations from the State of Utah Traffic Records Assessment Conducted May 21, 2019

Status for 2021 Highway Safety Plan

Recommendation	Intend to Implement	Performance Measure(s) to Demonstrate Progress	Reason For Not Implementing
Strategic Planning Recommendations			
Strengthen the TRCC's abilities for strategic planning that reflects best practices identified in the Traffic Records Program Assessment Advisory.	Yes	T1-7, ACR1-4, C1-3, U1-2, I1-12, ACS1-4	N/A
Crash Recommendations			
Improve the data dictionary for the Crash data system that reflects the best practices identified in the Traffic Records Program Assessment Advisory.	Yes	U2, I1	N/A
Improve the procedures/ process flows for the Crash data system that reflects the best practices identified in the Traffic Records Program Assessment Advisory.	Yes	T1, T2	N/A
Improve the interfaces with the Crash data system that reflect the best practices identified in the Traffic Records Program Assessment Advisory.	Yes	C3	N/A

Improve the data quality control program for the Crash data system that reflects the best practices identified in the Traffic Records Program Assessment Advisory.	Yes	C1	N/A
Vehicle Recommendations			
Improve the interfaces with the Vehicle data system that reflect the best practices identified in the Traffic Records Program Assessment Advisory.	Yes	T3, U2, I1, I3	N/A
Improve the data quality control program for the Vehicle data system that reflects the best practices identified in the Traffic Records Program Assessment Advisory.	No	N/A	New vehicle system provides current technology and an environment to provide expanded services to Utah traffic safety stakeholders. Every VIN is validated using RL Polk's VinTelligence software and there is a real-time interface to NMVTIS.
Driver Recommendations			
Improve the data dictionary for the Driver data system that reflects the best practices identified in the Traffic Records Program Assessment Advisory.	No	N/A	There is no driver system data dictionary in and of itself. However, the Utah Driver Handbook explains all the items that would be in a data dictionary. Also, there are specific validation rules in the driver system application process.
Improve the data quality control program for the Driver data system that reflects the best practices identified in the Traffic Records Program Assessment Advisory.	No	N/A	The driver system is fully compliant with the PDPS and CDLIS. A driver identity and verification process was implemented a few years ago. There is a three-level process for edit checks and validation rules.
Roadway Recommendations			
Improve the data dictionary for the Roadway data system that reflects the best practices identified in the Traffic Records Program Assessment Advisory.	Yes	U2	N/A
Improve the data quality control program for the Roadway data system that reflects the best practices identified in the Traffic Records Program Assessment Advisory.	Yes	C2, T4, I11	N/A
Citation/Adjudication Recommendations			
Improve the interfaces with the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.	Yes	I4, I9, I11	N/A
Improve the data quality control program for the Citation and Adjudication systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.	Yes	T5	N/A
EMS/Injury Surveillance Recommendations			
Improve the interfaces with the Injury Surveillance systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.	Yes	I5, I6, I7, I8, T6, T7	N/A
Improve the data quality control program for	Yes	ACR1, ACR2,	N/A

the Injury Surveillance systems that reflect best practices identified in the Traffic Records Program Assessment Advisory.		ACR3, ACR3, ACR4, U1, U2	
Data Use and Integration Recommendations			
Improve the traffic records systems capacity to integrate data that reflect the best practices identified in the Traffic Records Program Assessment Advisory.	Yes	I2, I3, I4, I5, I6, I7, I8, I9, I10, I11	N/A

COLLECTING AND USING THE MODEL INVENTORY OF ROADWAY ELEMENTS (MIRE) FUNDAMENTAL DATA ELEMENTS (FDE)

INTRODUCTION

The Federal Highway Administration (FHWA) issued guidance as part of the Fixing America's Surface Transportation Act (FAST Act) that states shall incorporate specific quantifiable and measurable anticipated improvements for the collection of MIRE FDEs into their State Traffic Records Strategic Plan update by July 1, 2017. [23 CFR 924.11(b)].

Background

In October 2010 FHWA published the Model Inventory of Roadway Elements (MIRE, https://safety.fhwa.dot.gov/rsdp/mire.aspx) for State Departments of Transportation (DOT's). MIRE defines roadway data elements that a State DOT should collect and maintain to facilitate high-level highway safety analysis, and specifically to be able to use the methods defined in the Highway Safety Manual (HSM). An update to this was published in July 2017 as MIRE 2.0. MIRE lists 205 data elements for Roadway Segments, Intersection and Interchange/RampRoadway. FHWA also defines Fundamental Data Elements (FDE, https://safety.fhwa.dot.gov/rsdp/fde/) as a subset of MIRE that are federally mandated to be collected and maintained by all State DOT's. The FDE includes 37 elements from MIRE with different requirements for non-local roads, local roads, and unpaved roads. Each State DOT is required to have all FDE collected September 30,by 2026. The purpose of this document is to define the Utah Department of Transportation (UDOT) plan for collecting and maintaining the FDE.

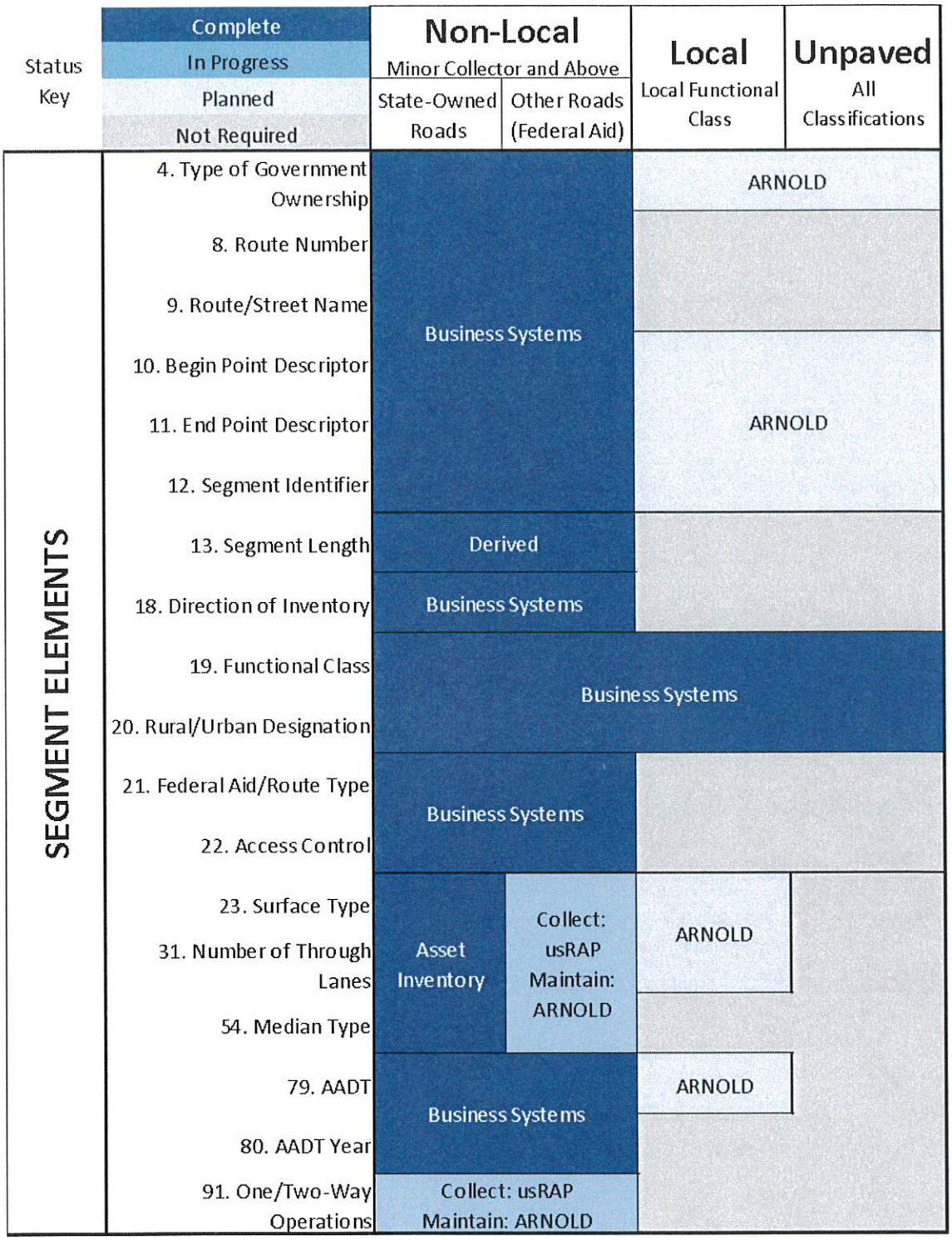
UDOT Collection & Maintenance Plan

The FDE requires 37 elements for non-local (minor collector or higher functional class) roads, 9 elements for local roads, and 5 elements for unpaved roads. Data elements are defined by segments, junctions (intersections), and interchanges. The following defines resources and methods UDOT will utilize for the collection and maintenance of these elements as well as the status of each.

1. UDOT Business Systems: Many of the FDE are already collected and maintained in existing UDOT business systems that will continue to be utilized.

    a. These systems are complete and in-place, they will be maintained by UDOT staff.
2. Biennial Asset Inventory: UDOT currently performs a full-system asset inventory every two years on all state-maintained highways.
    a. This process is in-place and programmed to continue.
3. usRAP (U.S. Road Assessment Program): usRAP is a highway safety model used by UDOT that requires significant data collection. This will be utilized to collect data for non-State non-local and local roads.
    a. usRAP has been completed on all state-maintained highways and on non-local roads in the urban counties. Additional counties are planned for the coming years.
4. ARNOLD: ARNOLD is the joint effort of several local and state agencies to establish a statewide roadway centerlines database. This tool will be utilized to collect and/or maintain FDE for unpaved, local, and non-state non-local roads.
    a. ARNOLD routes have been identified. Some data elements have been completed and work is being developed to finish the remaining required data elements.

The following tables lists the FDE required elements and how each will be collected. Non-local roads are divided into State Roads and Non-State Roads due to differences in how they are managed.


Status Key
Complete
In Progress
Planned
Not Required
Non-Local
Minor Collector and Above
State-Owned Roads
Other Roads (Federal Aid)
Local
Local Functional Class
Unpaved
All Classifications
SEGMENT ELEMENTS
4. Type of Government Ownership
8. Route Number
9. Route/Street Name
10. Begin Point Descriptor
11. End Point Descriptor
12. Segment Identifier
13. Segment Length
18. Direction of Inventory
19. Functional Class
20. Rural/Urban Designation
21. Federal Aid/Route Type
22. Access Control
23. Surface Type
31. Number of Through Lanes
54. Median Type
79. AADT
80. AADT Year
91. One/Two-Way Operations
Business Systems
ARNOLD
Derived
Business Systems
Business Systems
Business Systems
ARNOLD
Asset Inventory
Collect: usRAP Maintain: ARNOLD
ARNOLD
Business Systems
ARNOLD
Collect: usRAP Maintain: ARNOLD

Status Key	Complete	In Progress	Planned	Not Required	Non-Local (Minor Collector and Above)		Local	Unpaved
					State-Owned Roads	Other Roads (Federal Aid)	Local Functional Class	All Classifications
JUNCTION ELEMENTS								
120. Junction Identifier					Asset Inventory	Collect: usRAP Maintain: ARNOLD		
122. Identifier for Road 1 Crossing Point								
123. Identifier for Road 2 Crossing Point								
126. Intersection Geometry								
131. Intersection Traffic Control								
139. Unique Approach Identifier						Collection method unknown/unavailable		
140. Approach AADT					Business Systems			
141. Approach AADT Year								

Status Key	Complete	In Progress	Planned	Not Required	Non-Local (Minor Collector and Above)		Local	Unpaved
					State-Owned Roads	Other Roads (Federal Aid)	Local Functional Class	All Classifications
INTERCHANGE ELEMENTS								
178. Interchange Identifier					Asset Inventory	Not Applicable, All Interchanges are Located on the State System		
182. Interchange Type								
187. Ramp Length					Derived			
191. Ramp AADT					Business Systems			
192. Year of Ramp AADT								
19. Functional Class								
4. Type of Government Ownership								
195. Roadway Type at Beginning Ramp Terminal								
197. Location Identifier for Roadway at Beginning Ramp					Asset Inventory			
199. Roadway Type at Ending Ramp Terminal					Collection method unknown/unavailable			
201. Location Identifier for Roadway at Ending Ramp					Asset Inventory			